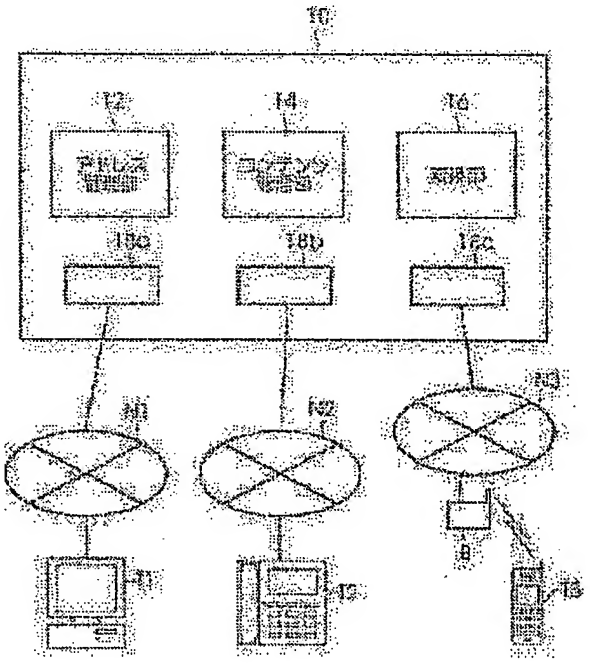
Ref 1

METHOD AND SYSTEM FOR PROCESSING COMMUNICATION

Publication number: JP2002261834 (A)
Publication date: 2002-09-13
Inventor(s): HANEDA TOMOYOSHI
Applicant(s): NTT ADVANCED TECH KK
Classification:
- international: ***G06F13/00; H04L12/58;*** **G06F13/00; H04L12/58;** (IPC1-7): H04L12/58; G06F13/00
- European:
Application number: JP20010052427 20010227
Priority number(s): JP20010052427 20010227

Abstract of **JP 2002261834 (A)**

PROBLEM TO BE SOLVED: To provide a method and a system for processing communication in which a transmitter can transmit various kinds of information unconsciously of a kind of information being transmitted or received, the communication means being used by a receiver or the conditions of the receiver, and various kinds of information transmitted from the transmitter can be received in a format suitable for the communication means being used by the receiver. SOLUTION: An address management section 12 manages a plurality of terminating addresses in correspondence with one representative address thereof. Information transmitted to the representative address is stored and managed at a content management section 14 and converted, at a converting section 16 into a format designated by the receiver before being transmitted to a terminating address designated by the receiver.



Partial English Translation of Cited document 1 (JP, 2002-261834A)

[0015]

Since this embodiment, in this way, defines a representative address representing an incoming address for every recipient, a sender of content can send the content to the representative address in sending the content to a recipient. Accordingly, the sender does not need to consider the type of the content, the communication tools the recipient uses (a terminal unit T1, a telephone set T2, a cellular phone T3, a facsimile and a portable device, which are not shown), and the condition of the recipient, at all.

[0016]

The content management unit 14 stores and manages content sent from a sender to a representative address of a recipient for every representative address, or for every recipient. In other word, the content management unit 14 has a private mail box for every recipient. The converter 16 converts the content that is sent to the representative address and then stored and managed in the content management unit 14 into a form specified by the recipient.

[0017]

Now, assuming that content that is stored and managed in the content management unit 14 is an email containing only text data. In this case, when the recipient receives the email in the form of email using the terminal unit T1, the recipient specifies the reception in the form of email. At this time, the converter 16 does not convert the content stored and managed in the content management unit 14.

[0018]

Alternatively, when the recipient receives an email in the form of sound using a telephone set T2 or a cellular phone T3, the recipient specifies the reception in the form of sound. At this time, the converter 16 converts the origin of the email, the time of sending, the title (subject), and the body of the email (these are all text information) that are stored and managed in the content management unit 14 into sound information. Besides, when the recipient specifies the reception in the form of facsimile (not shown), the converter 16 converts the email stored in the content management unit 14 into image information that can be received by a facsimile. In addition, if sound information is stored in the content management unit 14, the converter 16 converts the information into text information or image information. If image information is stored in the content management unit 14, the converter 16 converts the information into text information or sound information.

[0025]

For example, in the parameter P1, 17:00 is specified as a time of receiving C1, Incoming address A1 as an incoming address C2, Email as a type of media C3, and Retry as a process during busy C4. Retry is a process of resending the content to the incoming address after a certain period of time when an error occurs during sending the content. The number of retry cycles is predetermined.

Ref. 1

(19)日本国特許庁（ＪＰ）　(12)公開特許公報（Ａ）　(11)特許出願公開番号
特開2002－261834
（Ｐ2002－261834Ａ）
(43)公開日　平成14年９月13日(2002.9.13)

(51)Int.Cl.⁷	識別記号	ＦＩ	テーマコード（参考）
Ｈ０４Ｌ　12/58	１００	Ｈ０４Ｌ　12/58	１００Ｃ　５Ｋ０３０
Ｇ０６Ｆ　13/00	６０１	Ｇ０６Ｆ　13/00	６０１Ａ
	６１０		６１０Ｄ

審査請求　未請求　請求項の数６　ＯＬ　（全６頁）

(21)出願番号　特願2001－52427(Ｐ2001－52427)

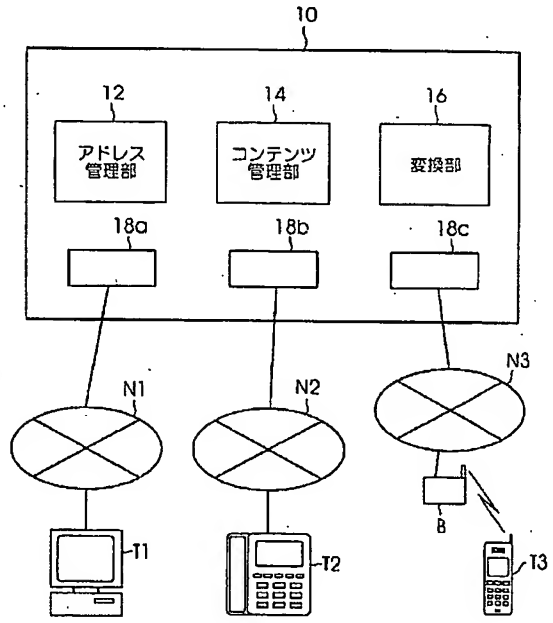
(22)出願日　平成13年２月27日(2001.2.27)

(71)出願人　000102739
エヌ・ティ・ティ・アドバンステクノロジ株式会社
東京都新宿区西新宿二丁目１番１号
(72)発明者　羽田　知良
東京都新宿区西新宿二丁目１番１号　エヌ・ティ・ティ・アドバンステクノロジ株式会社内
(74)代理人　100064908
弁理士　志賀　正武

Ｆターム(参考)　5K030 GA17 HA07 HC01 HD03 KA04 LB16 LD10

(54)【発明の名称】　通信処理方法及び装置

(57)【要約】
【課題】　送信又は受信する情報の種類、受信者が使用している通信手段、及び受信者の状況等を全く意識せずに送信者が各種の情報を送信することができるとともに、送信者から送信されてきた各種情報を受信者の状況や受信者が使用する通信手段に適した形式で受信することができる通信処理方法及び装置を提供する。
【解決手段】　アドレス管理部１２は受信者が有する複数の着信アドレスと着信アドレスを代表する１つの代表アドレスとを対応づけて管理する。代表アドレス宛に送信されてきた情報はコンテンツ管理部１４で記憶管理されており、受信者により指定された形式に変換部１６で変換された後、受信者により指定された着信アドレスへ送信される。



1

【特許請求の範囲】

【請求項１】　受信者が有する１又は２以上の着信アドレスと当該着信アドレスを代表する代表アドレスとを対応づけるステップと、

前記代表アドレス宛に送信されてきた情報を、前記受信者により指定された着信アドレスへ指定された形式で送信するステップとを有することを特徴とする通信処理方法。

【請求項２】　前記代表アドレス宛に送信されてきた情報を、前記受信者により指定された形式に変換するステップを更に有することを特徴とする請求項１記載の通信処理方法。

【請求項３】　前記代表アドレス宛に送信されてきた情報を受信する条件として、前記着信アドレス及び前記形式並びに受信する時刻を一組として優先順を付して登録するステップを更に有することを特徴とする請求項１又は請求項２記載の通信処理方法。

【請求項４】　受信者が有する１又は２以上の着信アドレスと当該着信アドレスを代表する代表アドレスとを対応づけて管理するアドレス管理手段と、

前記代表アドレス宛に送信されてきた情報を記憶管理する情報管理手段とを有し、

前記情報管理手段に記憶管理されている前記情報を、前記受信者により指定された着信アドレスへ指定された形式で送信することを特徴とする通信処理装置。

【請求項５】　前記代表アドレス宛に送信されてきた情報を、前記受信者により指定された形式に変換する変換手段を更に有することを特徴とする請求項４記載の通信処理装置。

【請求項６】　前記代表アドレス宛に送信されてきた情報を受信する条件として、前記着信アドレス及び前記形式並びに受信する時刻を一組として優先順を付して登録されており、

前記変換手段は、予め登録されている形式の優先順に前記情報管理手段に記憶管理されている前記情報を変換することを特徴とする請求項５記載の通信処理装置。

【発明の詳細な説明】

【０００１】

【発明の属する技術分野】本発明は、送信されてきた各種の情報を、インターネット等のネットワークに接続されたパーソナルコンピュータ等の端末装置、固定電話、ファクシミリ、携帯端末等を用いて受信するための通信処理方法及び装置に関する。

【０００２】

【従来の技術】インターネットは、コンピュータとルータとが相互に接続されてなる世界規模のネットワークであり、国境を越えてディジタル化された文字情報、音声情報、音楽情報、画像情報（動画及び静止画を含む）等の各種データの授受及び各種データの配信が活発に行われている。インターネットでは、郵便を電子化したいわゆる電子メールのサービスがインターネット創設時から提供されており、現在では電子メールを用いて仕事上の連絡や個人的な連絡が活発に行われている。

2

【０００３】電子メールは、基本的に文字情報の授受を目的としたサービスであったが、近時においては、画像情報等の上記各種情報を電子メールに添付することが可能となり、電子メール形式で各種情報の授受を行うことができるようになった。インターネットを介した上記種々の情報は、基本的にパーソナルコンピュータ等のコンピュータを用いて行われる。

【０００４】上記インターネットとは別個に、従来から電話、ファクシミリ、携帯端末等が通信手段として用いられているが、電話を用いて通話を行う場合には通話者が電話機を用いて電話回線網を介して通話を行い、文書を送信する場合には送信者がファクシミリから電話回線網を介して受信者のファクシミリにそのデータを送信する必要があった。また、携帯端末の一種である携帯電話機を用いて通話する場合には、通話者双方が携帯電話機を用いて無線回線網を介して通話していた。

【０００５】

【発明が解決しようとする課題】ところで、上述したように、従来は通信手段各々が独立していたため、相手と通信又は通話する際には、その内容に応じて通信手段を選択しなければならず、しかもある特定の者と通話又は通信する場合であっても通信手段毎に電話番号、ファクシミリ番号、端末番号、又は電子メールアドレスを指定しなければならない。

【０００６】また、近年においては前述した電子メールの利用率が向上し、一人の者が複数の電子メールアドレスを有することが多くなっている。よって、例えば就業時に仕事に関する内容の電子メールを相手に送信する場合には相手の仕事用のメールアドレスを指定し、就業終了時に個人的・家庭的な内容の電子メールを送信する場合にはその人が個人的に使用している電子メールアドレスをそれぞれ指定する必要がある。このように、従来は同一の者と通信又は通話するときであっても、通信手段及び時と場合に応じて相手の電話番号等や電子メールアドレスを選択して指定しなければならず、手間がかかって利便性が悪いという問題があった、

【０００７】本発明は上記事情に鑑みてなされたものであり、送信又は受信する情報の種類、受信者が使用している通信手段、及び受信者の状況等を全く意識せずに送信者が各種の情報を送信することができるとともに、送信者から送信されてきた各種情報を受信者の状況や受信者が使用する通信手段に適した形式で受信することができる通信処理方法及び装置を提供することを目的とする。

【０００８】

【課題を解決するための手段】上記課題を解決するために本発明の通信処理方法は、受信者が有する１又は２以

上の着信アドレス（Ａ１～Ａ３）と当該着信アドレス（Ａ１～Ａ３）を代表する代表アドレス（Ａ０）とを対応づけるステップ（Ｓ１０）と、前記代表アドレス（Ａ０）宛に送信されてきた情報を、前記受信者により指定された着信アドレスへ指定された形式で送信するステップ（Ｓ３０）とを有することを特徴としている。この発明によれば、受信者毎に着信アドレスを代表する代表アドレスを定めているため、情報の送信者が受信者へ情報を送信する場合には代表アドレス宛に情報を送信すれば良く、情報の種類、受信者が使用している通信手段、及び受信者の状況等を全く意識する必要がないという効果がある。また、送信者が代表アドレス宛に送信した情報を受信者が指定した着信アドレスに指定した形式で受信することができるため、受信者が代表アドレスに送信されてきた情報を受信する際に、通信手段によって受信できたり受信できなかったりする不都合はないという効果がある。また、本発明の通信処理方法は、前記代表アドレス宛に送信されてきた情報を、前記受信者により指定された形式に変換するステップを更に有することを特徴としている。また、本発明の通信処理方法は、前記代表アドレス宛に送信されてきた情報を受信する条件として、前記着信アドレス及び前記形式並びに受信する時刻を一組として優先順を付して登録するステップを更に有することを特徴としている。上記課題を解決するために本発明の通信処理装置は、受信者が有する１又は２以上の着信アドレス（Ａ１～Ａ３）と当該着信アドレス（Ａ１～Ａ３）を代表する代表アドレス（Ａ０）とを対応づけて管理するアドレス管理手段（１２）と、前記代表アドレス（Ａ０）宛に送信されてきた情報を記憶管理する情報管理手段（１４）とを有し、前記情報管理手段（１４）に記憶管理されている前記情報を、前記受信者により指定された着信アドレスへ指定された形式で送信することを特徴としている。また、本発明の通信処理装置は、前記代表アドレス（Ａ０）宛に送信されてきた情報を、前記受信者により指定された形式に変換する変換手段（１６）を更に有することを特徴としている。また、本発明の通信処理装置は、前記代表アドレス（Ａ０）宛に送信されてきた情報を受信する条件として、前記着信アドレス及び前記形式並びに受信する時刻を一組として優先順を付して登録されており、前記変換手段（１６）は、予め登録されている形式の優先順に前記情報管理手段（１４）に記憶管理されている前記情報を変換することを特徴としている。

【０００９】

【発明の実施の形態】以下、図面を参照して本発明の実施形態について説明する。図１は、本発明の一実施形態による通信処理装置の構成を示す機能ブロック図である。図１において、１０は本実施形態による通信処理装置である。この通信処理装置１０はインターネット網Ｎ１、電話回線網Ｎ２、及び無線回線網Ｎ３各々に接続されている。通信処理装置１０には終端装置１８ａ～１８ｃが設けられ、各網Ｎ１～Ｎ３の接続を終端している。

【００１０】インターネット網Ｎ１にはパーソナルコンピュータ等の端末装置Ｔ１が接続され、電話回線網Ｎ２には電話機Ｔ２が接続され、無線回線網Ｎ３には基地局Ｂを介して携帯電話機Ｔ３が接続されている。尚、図示は省略しているが、電話回線網Ｎ２にファクシミリが接続され、無線回線網Ｎ３にモバイル端末等の携帯端末装置が接続されていても良い。以下、これらを総称する場合には単に「端末装置」という。

【００１１】尚、以下では説明の便宜のために、図１に示した端末装置Ｔ１、電話機Ｔ２、携帯電話機Ｔ３、更には図示しないファクシミリ及び携帯端末装置は、全て受信者が所有するものとする。つまり、受信者は端末装置Ｔ１、電話機Ｔ２、携帯電話機Ｔ３、ファクシミリ、及び携帯端末装置の何れかを用いて図示しない送信者から送信されてきた情報を受信するものとする。

【００１２】また、本実施形態において、情報とはディジタル化された文字情報、音声情報、音楽情報、画像情報（動画及び静止画を含む）等の各種データをいう。更に、音声情報には電話機Ｔ２や携帯電話機Ｔ３を介して送信される音声情報が含まれ、画像情報には図示しないファクシミリから送信されるデータが含まれる。以下、本発明にいう情報をコンテンツと称する。

【００１３】本実施形態の通信処理装置１０は、アドレス管理部１２、コンテンツ管理部１４、及び変換部１６を有している。アドレス管理部１２は、図２に示すように、受信者が有する１又は２以上の着信アドレスと、この着信アドレスを代表する代表アドレスとを対応づけて管理するものである。図２は、代表アドレスに複数の着信アドレスが対応づけられた様子を示す図である。図２に示した例では、代表アドレスＡ０に複数の着信アドレスＡ１～Ａ３が対応づけられている。ここで、着信アドレスとは、受信者が有する１又は２以上の電子メールアドレス、並びに、電話機Ｔ２、携帯電話機Ｔ３、図示しないファクシミリ、及び携帯端末装置の着信番号（電話番号）をいう。

【００１４】代表アドレスＡ０は、受信者が有する上記着信アドレスＡ１～Ａ３全てを代表するアドレスであり、受信者毎に任意のアドレスが割り当てられる。代表アドレスとしては、図３に示すようなものが割り当てられる。図３は、代表アドレスの指定方法を説明するための図である。前述したように、受信者は端末装置Ｔ１、電話機Ｔ２、携帯電話機Ｔ３、更には図示しないファクシミリ及び携帯端末装置を所有している訳であるが、電話機Ｔ２、携帯電話機Ｔ３、更には図示しないファクシミリ及び携帯端末装置の場合には、例えば他と重複しない電話番号がそのまま、又はこの電話番号の先頭に、例えば「００＊＊」等の特番を付したものが代表アドレスとして用いられる。電子メールアドレスを代表アドレス

とする場合には、図３に示したように、「代表アドレス@特定ドメイン」として定められる。

【００１５】このように、本実施形態では、受信者毎に着信アドレスを代表する代表アドレスを定めているため、コンテンツの送信者が受信者へコンテンツを送信する場合には代表アドレス宛にコンテンツを送信すれば良く、コンテンツの種類、受信者が使用している通信手段（端末装置Ｔ１、電話機Ｔ２、携帯電話機Ｔ３、図示しないファクシミリ及び携帯端末装置）、及び受信者の状況等を全く意識する必要がない。

【００１６】コンテンツ管理部１４は、送信者から受信者の代表アドレス宛に送信されてきたコンテンツを代表アドレス毎、つまり受信者毎に記憶管理する。つまり、コンテンツ管理部１４には受信者毎の私書箱が設けられているということができる。変換部１６は、代表アドレス宛に送信されてきてコンテンツ管理部１４に記憶管理されているコンテンツを、受信者により指定された形式に変換する。

【００１７】いま、コンテンツ管理部１４に記憶管理されているコンテンツが文字情報のみからなる電子メールである場合を考える。この場合、受信者が端末装置Ｔ１を用いて電子メールの形式で受信するときには、受信者により電子メールの形式で受信する旨が指定される。このとき変換部１６はコンテンツ管理部１４に記憶管理されているコンテンツに対して変換処理は行わない。

【００１８】しかしながら、受信者が電話機Ｔ２や携帯電話機Ｔ３を用いて音声の形式で受信するときには、受信者により音声の形式で受信する旨が指定される。このとき変換部１６は、変換部１６はコンテンツ管理部１４に記憶管理されている電子メールの送信元、送信時間、タイトル（サブジェクト）、及び電子メールの本文（これらは何れも文字情報である）を音声情報に変換する。また、受信者が図示しないファクシミリの形式で受信する旨を指定した場合には、変換部１６はコンテンツ管理部１４に記憶されている電子メールをファクシミリで受信可能な画像情報に変換する。また、コンテンツ管理部１４に音声情報が保存されている場合には、変換部１６は文字情報に変換したり、更に画像情報に変換する。更に、コンテンツ管理部１４に画像情報が保存されている場合には、変換部１６は文字情報に変換したり、更に音声情報に変換する。

【００１９】以上、本発明の一実施形態による通信処理装置の構成について説明したが、次に本発明の一実施形態による通信処理装置の動作、つまり本発明の一実施形態による通信処理方法について説明する。図４は、本発明の一実施形態による通信処理方法の概略フローを示すフローチャートである。まず、受信者は通信処理装置１０にアクセスし、図２に示したように代表アドレスと着信アドレスとをアドレス管理部１２に予め登録しておく（ステップＳ１０）。

【００２０】代表アドレスと着信アドレスとの登録が終了し、送信者が受信者の登録した代表アドレスにコンテンツを送信すると、送信されてきたコンテンツはコンテンツ管理部１４に記憶管理される（ステップＳ２０）。ここで、送信者が送信したコンテンツがディジタル化されたものである場合には、コンテンツ管理部１４にそのまま保存され管理されるが、例えば送信者が電話機から音声情報を代表アドレス宛に送信した場合には、音声情報がディジタル化されてコンテンツとしてコンテンツ管理部１４に記憶管理される。

【００２１】コンテンツ管理部１４にコンテンツが記憶管理されている状態において、受信者が、例えば端末装置Ｔ１を用いて通信処理装置１０にアクセスし、コンテンツ管理部１４に記憶されているコンテンツを受信する着信アドレス及び受信の形式を指定する。例えば、受信者が端末装置Ｔ１を操作して通信処理装置１０にアクセスしている場合には、着信アドレスとして特定の電子メールアドレスを指定し、電子メールの形式で受信する旨を指定する。

【００２２】受信者により上記の指示がなされると、変換部１６はコンテンツ管理部１４に記憶されているコンテンツを受信者により指定された形式（例えば、電子メールの形式）に変換する。変換部１６による変換処理が終了すると、通信処理装置は、変換後のコンテンツを受信者により指定された着信アドレスへ送信する（ステップＳ３０）。

【００２３】以上、本発明の一実施形態による通信処理方法及び装置について説明したが、上記実施形態では、受信者がコンテンツを受信する場合には、端末装置を用いて通信処理装置１０にアクセスしなければならないという不具合がある。これを解決するために、受信者が予めコンテンツを受信する着信アドレス及び形式並びに受信する時刻を通信処理装置１０に対して指定しておき、指定した時刻が到来したら自動的に指定した着信アドレスにコンテンツが送信される方が利便性が高い。

【００２４】次に、かかる機能を実現する本発明の他の実施形態について説明する。図５は、本発明の他の実施形態による通信処理装置において、予め通信処理装置に指定する受信条件を示す図である。図５に示したように、通信処理装置１０に対して指定する項目は、着信時間Ｃ１、着信アドレスＣ２、メディア種別Ｃ３、ビジー時の処理Ｃ４がある。着信時間Ｃ１は、代表アドレスに送信されてきたコンテンツを着信する時刻、即ち通信処理装置１０が送信する時刻を指定する項目である。着信アドレスＣ２は、通信処理装置１０が代表アドレスに送信されてきたコンテンツを送信する着信アドレスを指定する項目である。メディア種別Ｃ３は受信者がコンテンツを受信する形式を指定する項目である。ビジー時の処理Ｃ４は、コンテンツの送信時にエラーが生じたときの対処方法を指定する項目である。

【００２５】例えばパラメータＰ１では、着信時間Ｃ１として１７：００が指定され、着信アドレスＣ２として着信アドレスＡ１が指定され、メディアの種類Ｃ３として電子メールが指定され、ビジー時の処理Ｃ４としてリトライが指定されている。ここで、リトライとはコンテンツ送信時にエラーが生じた場合に、一定時間後その着信アドレスに再度コンテンツを送信する処理である。このリトライ回数は予め定められている。

【００２６】図５に示されるように、着信時間Ｃ１、着信アドレスＣ２、メディア種別Ｃ３、ビジー時の処理Ｃ４は各々１つのみが指定可能な訳ではなく、優先順位を付して複数指定することができる。図５に示した例では、パラメータＰ１で指定された各項目が最優先され、次にパラメータＰ２で指定された各項目が優先される。つまり、コンテンツをパラメータＰ１の条件で送信した時に、予め定められた回数リトライ処理を行ったがコンテンツを送信できない場合には、パラメータＰ２の条件でコンテンツが送信されることになる。以上説明した各項目を受信者が通信処理装置１０に対して予め設定しておくことにより、受信者の代表アドレス宛のコンテンツが、受信者の指定した時刻に、指定した着信アドレスへ、指定した形式で送信されることになる。

【００２７】以上説明したように本実施形態によれば、送信者が代表アドレス宛に送信したコンテンツを受信者が指定した着信アドレスに指定した形式で受信することができるため、受信者が代表アドレスに送信されてきたコンテンツを受信する際に、通信手段によって受信できたり受信できなかったりする不都合はない。更には、受信者が着信時間を指定することができるため、受信者が意図的に代表アドレスへのコンテンツの着信の有無を確認する手間を省略することができ、利便性を向上させることができる。

【００２８】以上、本発明の実施形態について説明したが、本発明は上記実施形態に制限されることはなく、本発明の範囲内で自由に変更が可能である。例えば、図１に示した通信処理装置１０が有するアドレス管理部１＊２、コンテンツ管理部１４、及び変換部１６はハードウェアで実現されていても良く、又はソフトウェアで実現されていても良い。また、これらは一つの装置として実現されていても良く、各々がネットワークで接続された個別の装置で実現されていても良い。

【００２９】

【発明の効果】以上説明したように、本発明によれば、受信者毎に着信アドレスを代表する代表アドレスを定めているため、情報の送信者が受信者へ情報を送信する場合には代表アドレス宛に情報を送信すれば良く、情報の種類、受信者が使用している通信手段、及び受信者の状況等を全く意識する必要がないという効果がある。また、送信者が代表アドレス宛に送信した情報を受信者が指定した着信アドレスに指定した形式で受信することができるため、受信者が代表アドレスに送信されてきた情報を受信する際に、通信手段によって受信できたり受信できなかったりする不都合はないという効果がある。

【図面の簡単な説明】

【図１】　本発明の一実施形態による通信処理装置の構成を示す機能ブロック図である。

【図２】　代表アドレスに複数の着信アドレスが対応づけられた様子を示す図である。

【図３】　代表アドレスの指定方法を説明するための図である。

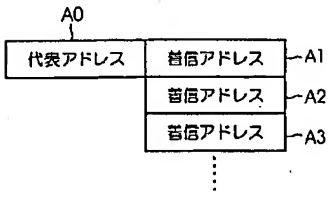
【図４】　本発明の一実施形態による通信処理方法の概略フローを示すフローチャートである。

【図５】　本発明の他の実施形態による通信処理装置において、予め通信処理装置に指定する受信条件を示す図である。

【符号の説明】

Ａ１～Ａ３	着信アドレス
Ａ０	代表アドレス
１２	アドレス管理部（アドレス管理手段）
１４	コンテンツ管理部（情報管理手段）
１６	変換部（変換手段）

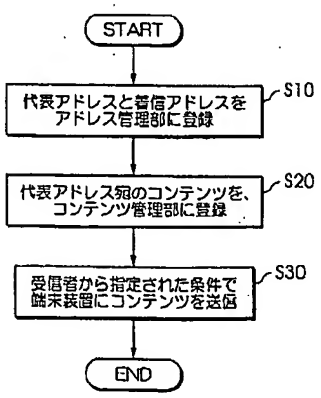
【図２】



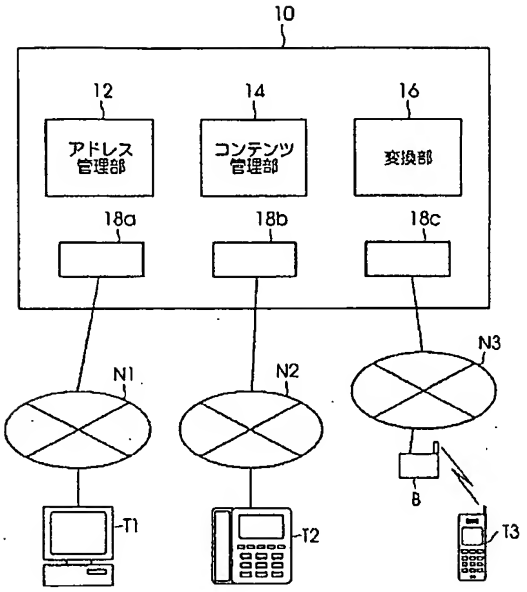
【図３】

代表アドレスの種別	代表アドレスの指定方法
電話、ＦＡＸ、携帯端末	特番＋代表アドレス 又は 代表アドレス
電子メール	代表アドレス@特定ドメイン

【図４】



【図１】



【図５】

		P1	P2	
	項目	パラメータ	パラメータ	
C1	着信時間	１７：００	１８：００	
C2	着信アドレス	着信アドレスＡ１	着信アドレスＡ２	・・・・・
C3	メディア種別	電子メール	音声	
C4	ビジー時の処理	リトライ	不通	

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1]A communication processing method comprising:
A step which matches 1 or two or more mail arrival addresses which an addressee has, and a representative address representing the mail arrival address concerned.
A step which transmits information transmitted to said addressing to a representative address in form specified to a mail arrival address specified by said addressee.

[Claim 2]The communication processing method according to claim 1 having further a step which changes information transmitted to said addressing to a representative address into form specified by said addressee.
[Claim 3]The communication processing method according to claim 1 or 2 having further a step which attaches and registers a priority by making said mail arrival address, said form, and time to receive into a lot as conditions which receive information transmitted to said addressing to a representative address.
[Claim 4]A communication processing unit which is provided with the following and characterized by transmitting said information by which storage and file management is carried out to said information control means in form specified to a mail arrival address specified by said addressee.
An address administration means to match and manage 1 or two or more mail arrival addresses which an addressee has, and a representative address representing the mail arrival address concerned.
An information control means which carries out storage and file management of the information transmitted to said addressing to a representative address.

[Claim 5]The communication processing unit according to claim 4 having further a conversion method which changes information transmitted to said addressing to a representative address into form specified by said addressee.
[Claim 6]As conditions which receive information transmitted to said addressing to a representative address, by making said mail arrival address, said form, and time to receive into a lot, attach a priority and it is registered, The communication processing unit according to claim 5, wherein said conversion method changes said information by which storage and file management is carried out to a priority of form registered beforehand at said information control means.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention]This invention relates to the communication processing method and device for receiving using terminal units, such as a personal computer by which various kinds of transmitted information was connected to networks, such as the Internet, a fixed-line telephone, a facsimile, a personal digital assistant, etc.
[0002]
[Description of the Prior Art]The Internet is a network of a worldwide scale with which it comes to connect a computer and a router mutually.
Transfer of various data, such as text, speech information, music information, picture information (an animation and a still picture are included), etc. which were digitized across the border, and distribution of various data are performed actively.
In the Internet, the service of what is called an E-mail which electronized mail is provided from the time of the Internet foundation, and the connection and the individual connection on work are actively performed using the E-mail at the present.
[0003]Although the E-mail was service aiming at transfer of text fundamentally, it becomes possible to attach the above-mentioned varieties of information, such as picture information, to an E-mail, and the variety of information could be delivered in recently and received by electronic mail format. The above-mentioned various information through the Internet is fundamentally performed using computers, such as a personal computer.
[0004]Separately from the above-mentioned Internet, although a telephone, a facsimile, a personal digital assistant, etc. are used as a means of communication from the former, When talking over the telephone using a telephone, the call person talked over the telephone via the telephone network using telephone, and when a document was transmitted, the sending person needed to transmit the data to the addressee's facsimile via the telephone network from the facsimile. When talking over the telephone using the portable telephone which is a kind of a personal digital assistant, both call person was talking over the telephone via the wireless circuit network using the portable telephone.
[0005]

[Problem(s) to be Solved by the Invention]By the way, when communicating or telephoning to a partner since the means of communication of each were independently conventionally as mentioned above. A means of communication must be chosen according to the contents, and even if it is a case where it moreover talks over the telephone or communicates with a certain specific person, a telephone number, a facsimile number, a terminal number, or an e-mail address must be specified for every means of communication.

[0006]The capacity factor of the E-mail mentioned above in recent years improved, and the one person has two or more e-mail addresses more often. For example, in transmitting the E-mail of the contents about work to a partner at the time of employment, it specifies the mail address for a partner's work therefore, To transmit the E-mail of contents individual at the time of the end of employment, and homely, the person needs to specify the e-mail address currently used individually, respectively. Thus, even if it was a time of communicating or telephoning to the same person conventionally, according to a means of communication and the time, and a case, the partner's telephone number etc. and e-mail address had to be chosen and specified, time and effort was taken and there was a problem that convenience was bad, [0007]In light of the above-mentioned circumstances, this invention is a thing.

While a sending person can transmit various kinds of information, without being conscious of the target kind of information, the means of communication which the addressee is using, an addressee's situation, etc. at all, It is providing the communication processing method and device which can receive the variety of information transmitted by the sending person in a form suitable for the means of communication which an addressee's situation and an addressee use.

[0008]

[Means for Solving the Problem]This invention is characterized by a communication processing method comprising the following, in order to solve an aforementioned problem.

A step which matches 1 or two or more mail arrival addresses (A1 - A3) which an addressee has, and a representative address (A0) representing the mail arrival address (A1 - A3) concerned (S10).

A step which transmits information transmitted to said addressing to a representative address (A0) in form specified to a mail arrival address specified by said addressee (S30).

Since a representative address which represents a mail arrival address for every addressee is defined according to this invention, What is necessary is just to transmit information to a representative address, when a sending person of information transmits information to an addressee, and it is effective in not being conscious of a kind of information, a means of communication which an addressee is using, an addressee's situation, etc. at all. Since information which a sending person transmitted to a representative address is receivable in form specified as a mail arrival address specified by an addressee, When an addressee receives information transmitted to a representative address, it is effective in that there is no inconvenience which can receive by a means of communication or cannot receive. A communication processing method of this invention is characterized by having further a step which changes information transmitted to said addressing to a representative address into form specified by said addressee. A communication processing method of this invention is characterized by having further a step which attaches and registers a priority by making said mail arrival address, said form, and time to receive into a lot as conditions which receive

information transmitted to said addressing to a representative address. In order to solve an aforementioned problem a communication processing unit of this invention, An address administration means (12) to match and manage 1 or two or more mail arrival addresses (A1 - A3) which an addressee has, and a representative address (A0) representing the mail arrival address (A1 - A3) concerned, It has an information control means (14) which carries out storage and file management of the information transmitted to said addressing to a representative address (A0), and is characterized by transmitting said information by which storage and file management is carried out to said information control means (14) in form specified to a mail arrival address specified by said addressee. A communication processing unit of this invention is characterized by having further a conversion method (16) which changes information transmitted to said addressing to a representative address (A0) into form specified by said addressee. A communication processing unit of this invention as conditions which receive information transmitted to said addressing to a representative address (A0), By making said mail arrival address, said form, and time to receive into a lot, a priority is attached, it is registered, and said conversion method (16) is characterized by changing said information by which storage and file management is carried out to a priority of form registered beforehand at said information control means (14).

[0009]

[Embodiment of the Invention]Hereafter, the embodiment of this invention is described with reference to drawings. Drawing 1 is a functional block diagram showing the composition of the communication processing unit by one embodiment of this invention. In drawing 1, 10 is a communication processing unit by this embodiment. This communication processing unit 10 is connected to Internet network N1, telephone network N2, and wireless circuit network N3 each.The terminating sets 18a-18c are formed in the communication processing unit 10, and the termination of the connection of each nets N1-N3 is carried out.

[0010]The terminal units T1, such as a personal computer, are connected to Internet network N1, the telephone T2 is connected to the telephone network N2, and portable telephone T3 is connected to the wireless circuit network N3 via the base station B. Although the graphic display is omitted, a facsimile may be connected to the telephone network N2, and personal digital assistant devices, such as a mobile terminal, may be connected to the wireless circuit network N3. Hereafter, in naming these generically, it only calls it a "terminal unit."

[0011]Below, an addressee shall own all of the terminal unit T1 shown in drawing 1 for the facilities of explanation, the telephone T2, portable telephone T3 and also the facsimile that is not illustrated, and a personal digital assistant device. That is, an addressee shall receive the information transmitted by the sending person who uses any of the terminal unit T1, the telephone T2, portable telephone T3, a facsimile, and a personal digital assistant device they are, and does not illustrate.

[0012]In this embodiment, information means digitized various data, such as text, speech information, music information, and picture information (an animation and a still picture are included). The speech information transmitted via the telephone T2 or portable telephone T3 is included in speech information, and the data transmitted from the facsimile which is not illustrated is contained in picture information. Hereafter, the information said to this invention is called contents.

[0013]The communication processing unit 10 of this embodiment has the address administration department 12, the contents managing department 14, and the converter 16. The address administration department 12

matches and manages 1 or two or more mail arrival addresses which an addressee has, and the representative address representing this mail arrival address, as shown in drawing 2. Drawing 2 is a figure showing signs that two or more mail arrival addresses were matched with the representative address. In the example shown in drawing 2, two or more mail arrival addresses A1 - A3 are matched with the representative address A0. Here, the connected line identification (telephone number) of 1 in which an addressee has a mail arrival address or two or more e-mail addresses and the telephone T2, portable telephone T3, the facsimile that is not illustrated, and a personal digital assistant device is said.

[0014]The representative address A0 is an address representing all the above-mentioned mail arrival addresses A1 which an addressee has - A3, and arbitrary addresses are assigned for every addressee. As a representative address, a thing as shown in drawing 3 is assigned. Drawing 3 is a figure for explaining the specification method of a representative address. As mentioned above, an addressee is a translation which owns the terminal unit T1, the telephone T2, portable telephone T3 and also the facsimile that is not illustrated, and the personal digital assistant device, but. In the case of the telephone T2, portable telephone T3 and also the facsimile that is not illustrated, and a personal digital assistant device, what gave special programs, such as "00**", to the head of that the telephone number which does not overlap with others, for example remains as it is, or this telephone number, for example is used as a representative address. When making an e-mail address into a representative address, as shown in drawing 3, it is set as a "representative address @ specific domain."

[0015]Thus, since the representative address which represents a mail arrival address with this embodiment for every addressee is defined, What is necessary is just to transmit contents to a representative address, when the sending person of contents transmits contents to an addressee, He does not need to be conscious of the kind of contents, the means of communication (the terminal unit T1, the telephone T2, portable telephone T3, a facsimile that is not illustrated, and a personal digital assistant device) which the addressee is using, an addressee's situation, etc. at all.

[0016]The contents managing department 14 carries out storage and file management of the contents transmitted to an addressee's addressing to a representative address from the sending person for every representative address of every, i.e., an addressee. That is, it can be told to the contents managing department 14 that PO Box for every addressee is provided. The converter 16 changes the contents by which are transmitted to a representative address and storage and file management is carried out to the contents managing department 14 into the form specified by the addressee.

[0017]Now, the case where the contents by which storage and file management is carried out to the contents managing department 14 are the E-mails which consist only of text is considered. In this case, when an addressee receives in the form of an E-mail using the terminal unit T1, receiving in the form of an E-mail by an addressee is specified. At this time, the converter 16 does not perform a conversion process to the contents by which storage and file management is carried out to the contents managing department 14.

[0018]However, when an addressee receives in the form of a sound using the telephone T2 or portable telephone T3, receiving in the form of a sound by an addressee is specified. At this time, as for the converter 16, transmitting [the E-mail with which storage and file management of the converter 16 is carried out to the contents managing department 14] origin changes air time, a title (subject), and the text (each of these is text) of an E-mail into speech information. When receiving in the form of the facsimile which an addressee

does not illustrate is specified, the converter 16 changes the E-mail memorized by the contents managing department 14 into the picture information which can receive by a facsimile. When speech information is saved in the contents managing department 14, the converter 16 is changed into text, and also is changed into picture information. When picture information is saved in the contents managing department 14, the converter 16 is changed into text, and also is changed into speech information.

[0019]In the above, although the composition of the communication processing unit by one embodiment of this invention was explained, the communication processing method by one embodiment of operation of the communication processing unit by one embodiment of this invention, i.e., this invention, is explained below. Drawing 4 is a flow chart which shows the outline flow of the communication processing method by one embodiment of this invention. First, an addressee accesses the communication processing unit 10, and as shown in drawing 2, he registers the representative address and the mail arrival address into the address administration department 12 beforehand (Step S10).

[0020]Registration with a representative address and a mail arrival address is completed, and if a sending person transmits contents to the representative address which the addressee registered, storage and file management of the transmitted contents will be carried out to the contents managing department 14 (Step S20). When the contents which the sending person transmitted are digitized here, it is saved as it is in the contents managing department 14, and are managed, but. For example, when a sending person transmits speech information to a representative address from telephone, speech information is digitized and storage and file management is carried out to the contents managing department 14 as contents.

[0021]In the state where storage and file management of the contents is carried out to the contents managing department 14, an addressee accesses the communication processing unit 10, for example using the terminal unit T1, and specifies the form of the mail arrival address and reception which receive the contents memorized by the contents managing department 14. For example, when an addressee operates the terminal unit T1 and has accessed the communication processing unit 10, a specific e-mail address is specified as a mail arrival address, and it specifies receiving in the form of an E-mail.

[0022]The converter 16 will be changed into the form (for example, form of an E-mail) specified by the addressee in the contents memorized by the contents managing department 14 if the above-mentioned directions are made by the addressee. After the conversion process by the converter 16 is completed, a communication processing unit transmits the contents after conversion to the mail arrival address specified by the addressee (Step S30).

[0023]As mentioned above, by the above-mentioned embodiment, although the communication processing method and device by one embodiment of this invention were explained, when an addressee receives contents, there is fault that the communication processing unit 10 must be accessed using a terminal unit. It is higher for convenience for the addressee to specify the mail arrival address and form of receiving contents beforehand, and the time to receive to the communication processing unit 10, and to transmit contents to the mail arrival address specified automatically, if the specified time comes in order to solve this.

[0024]Next, other embodiments of this invention which realize this function are described. In the communication processing unit by other embodiments of this invention, drawing 5 is a figure showing the receiving condition beforehand specified as a communication processing unit. As shown in drawing 5, the item specified to the communication processing unit 10 has the mail arrival time C1, the mail arrival address

C2, the media classification C3, and the processing C4 at the time of busy. The mail arrival time C1 is an item which specifies the time which receives a message in the contents transmitted to the representative address, i.e., the time which the communication processing unit 10 transmits. The mail arrival address C2 is an item which specifies the mail arrival address with which the communication processing unit 10 transmits the contents transmitted to the representative address. The media classification C3 is an item which specifies the form that an addressee receives contents. The processing C4 at the time of busy is an item which specifies a solution when an error arises at the time of transmission of contents.

[0025]For example, in the parameter P1, 17:00 is specified as the mail arrival time C1, the mail arrival address A1 is specified as the mail arrival address C2, an E-mail is specified as the kind C3 of media, and the retry is specified as the processing C4 at the time of busy. Here, a retry is processing which transmits contents to the mail arrival address again after fixed time, when an error arises at the time of contents transmission. This retry time is appointed beforehand.

[0026]As shown in drawing 5, the mail arrival time C1, the mail arrival address C2, the media classification C3, and the processing C4 at the time of busy are not the translations which can specify only one respectively, and can attach and carry out the plural specifications of the priority. In the example shown in drawing 5, each item specified with the parameter P1 is given top priority, and priority is given to each item specified with the parameter P2 next. That is, when contents are transmitted on condition of the parameter P1 and contents cannot be transmitted although number-of-times retry processing defined beforehand was performed, contents will be transmitted on condition of the parameter P2. When the addressee sets up beforehand each item explained above to the communication processing unit 10, the contents addressed to an addressee's representative address will be transmitted to the mail arrival address specified as the time which the addressee specified in the specified form.

[0027]Since the contents which the sending person transmitted to the representative address are receivable in the form specified as the mail arrival address specified by an addressee according to this embodiment as explained above, When an addressee receives the contents transmitted to the representative address, there is no inconvenience which can receive by a means of communication or cannot receive. Since an addressee can specify mail arrival time, an addressee can omit the time and effort which checks the existence of the arrival of the contents to a representative address intentionally, and can raise convenience.

[0028]As mentioned above, although the embodiment of this invention was described, this invention is not restricted to the above-mentioned embodiment, and can be freely changed within the limits of this invention. For example, it may realize by hardware or the address administration department 12, the contents managing department 14, and the converter 16 which the communication processing unit 10 shown in drawing 1 has may be realized by software. These may be realized as one device and each may be realized by the individual device connected in the network.

[0029]

[Effect of the Invention]Since the representative address which represents a mail arrival address for every addressee is defined according to this invention as explained above, What is necessary is just to transmit information to a representative address, when the sending person of information transmits information to an addressee, and it is effective in not being conscious of the kind of information, the means of communication which the addressee is using, an addressee's situation, etc. at all. Since the information which the sending

person transmitted to the representative address is receivable in the form specified as the mail arrival address specified by an addressee, When an addressee receives the information transmitted to the representative address, it is effective in that there is no inconvenience which can receive by a means of communication or cannot receive.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

TECHNICAL FIELD

[Field of the Invention]This invention relates to the communication processing method and device for receiving using terminal units, such as a personal computer by which various kinds of transmitted information was connected to networks, such as the Internet, a fixed-line telephone, a facsimile, a personal digital assistant, etc.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

PRIOR ART

[Description of the Prior Art]The Internet is a network of a worldwide scale with which it comes to connect a computer and a router mutually.
Transfer of various data, such as text, speech information, music information, picture information (an animation and a still picture are included), etc. which were digitized across the border, and distribution of various data are performed actively.
In the Internet, the service of what is called an E-mail which electronized mail is provided from the time of the Internet foundation, and the connection and the individual connection on work are actively performed using the E-mail at the present.
[0003]Although the E-mail was service aiming at transfer of text fundamentally, it becomes possible to attach the above-mentioned varieties of information, such as picture information, to an E-mail, and the variety of information could be delivered in recently and received by electronic mail format. The above-mentioned various information through the Internet is fundamentally performed using computers, such as a personal computer.
[0004]Separately from the above-mentioned Internet, although a telephone, a facsimile, a personal digital assistant, etc. are used as a means of communication from the former, When talking over the telephone using a telephone, the call person talked over the telephone via the telephone network using telephone, and when a document was transmitted, the sending person needed to transmit the data to the addressee's facsimile via the telephone network from the facsimile. When talking over the telephone using the portable telephone which is a kind of a personal digital assistant, both call person was talking over the telephone via the wireless circuit network using the portable telephone.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

EFFECT OF THE INVENTION

[Effect of the Invention]Since the representative address which represents a mail arrival address for every addressee is defined according to this invention as explained above, What is necessary is just to transmit information to a representative address, when the sending person of information transmits information to an addressee, and it is effective in not being conscious of the kind of information, the means of communication which the addressee is using, an addressee's situation, etc. at all. Since the information which the sending person transmitted to the representative address is receivable in the form specified as the mail arrival address specified by an addressee, When an addressee receives the information transmitted to the representative address, it is effective in that there is no inconvenience which can receive by a means of communication or cannot receive.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention]By the way, when communicating or telephoning to a partner since the means of communication of each were independently conventionally as mentioned above. A means of communication must be chosen according to the contents, and even if it is a case where it moreover talks over the telephone or communicates with a certain specific person, a telephone number, a facsimile number, a terminal number, or an e-mail address must be specified for every means of communication.

[0006]The capacity factor of the E-mail mentioned above in recent years improved, and the one person has two or more e-mail addresses more often. For example, in transmitting the E-mail of the contents about work to a partner at the time of employment, it specifies the mail address for a partner's work therefore, To transmit the E-mail of contents individual at the time of the end of employment, and homely, the person needs to specify the e-mail address currently used individually, respectively. Thus, even if it was a time of communicating or telephoning to the same person conventionally, according to a means of communication and the time, and a case, the partner's telephone number etc. and e-mail address had to be chosen and specified, time and effort was taken and there was a problem that convenience was bad, [0007]In light of the above-mentioned circumstances, this invention is a thing.

While a sending person can transmit various kinds of information, without being conscious of the target kind of information, the means of communication which the addressee is using, an addressee's situation, etc. at all, It is providing the communication processing method and device which can receive the variety of information transmitted by the sending person in a form suitable for the means of communication which an addressee's situation and an addressee use.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention]By the way, when communicating or telephoning to a partner since the means of communication of each were independently conventionally as mentioned above. A means of communication must be chosen according to the contents, and even if it is a case where it moreover talks over the telephone or communicates with a certain specific person, a telephone number, a facsimile number, a terminal number, or an e-mail address must be specified for every means of communication.

[0006]The capacity factor of the E-mail mentioned above in recent years improved, and the one person has two or more e-mail addresses more often. For example, in transmitting the E-mail of the contents about work to a partner at the time of employment, it specifies the mail address for a partner's work therefore, To transmit the E-mail of contents individual at the time of the end of employment, and homely, the person needs to specify the e-mail address currently used individually, respectively. Thus, even if it was a time of communicating or telephoning to the same person conventionally, according to a means of communication and the time, and a case, the partner's telephone number etc. and e-mail address had to be chosen and specified, time and effort was taken and there was a problem that convenience was bad, [0007]In light of the above-mentioned circumstances, this invention is a thing.

While a sending person can transmit various kinds of information, without being conscious of the target kind of information, the means of communication which the addressee is using, an addressee's situation, etc. at all, It is providing the communication processing method and device which can receive the variety of information transmitted by the sending person in a form suitable for the means of communication which an addressee's situation and an addressee use.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

MEANS

[Means for Solving the Problem]This invention is characterized by a communication processing method comprising the following, in order to solve an aforementioned problem.
A step which matches 1 or two or more mail arrival addresses (A1 - A3) which an addressee has, and a representative address (A0) representing the mail arrival address (A1 - A3) concerned (S10).
A step which transmits information transmitted to said addressing to a representative address (A0) in form specified to a mail arrival address specified by said addressee (S30).
Since a representative address which represents a mail arrival address for every addressee is defined according to this invention, What is necessary is just to transmit information to a representative address, when a sending person of information transmits information to an addressee, and it is effective in not being conscious of a kind of information, a means of communication which an addressee is using, an addressee's situation, etc. at all. Since information which a sending person transmitted to a representative address is receivable in form specified as a mail arrival address specified by an addressee, When an addressee receives information transmitted to a representative address, it is effective in that there is no inconvenience which can receive by a means of communication or cannot receive. A communication processing method of this invention is characterized by having further a step which changes information transmitted to said addressing to a representative address into form specified by said addressee. A communication processing method of this invention is characterized by having further a step which attaches and registers a priority by making said mail arrival address, said form, and time to receive into a lot as conditions which receive information transmitted to said addressing to a representative address. In order to solve an aforementioned problem a communication processing unit of this invention, An address administration means (12) to match and manage 1 or two or more mail arrival addresses (A1 - A3) which an addressee has, and a representative address (A0) representing the mail arrival address (A1 - A3) concerned, It has an information control means (14) which carries out storage and file management of the information transmitted to said addressing to a representative address (A0), and is characterized by transmitting said information by which storage and file management is carried out to said information control means (14) in form specified to a mail arrival address specified by said addressee. A communication processing unit of this invention is characterized by having further a conversion method (16) which changes information transmitted to said addressing to a representative address (A0) into form specified by said addressee. A communication

processing unit of this invention as conditions which receive information transmitted to said addressing to a representative address (A0), By making said mail arrival address, said form, and time to receive into a lot, a priority is attached, it is registered, and said conversion method (16) is characterized by changing said information by which storage and file management is carried out to a priority of form registered beforehand at said information control means (14).

[0009]

[Embodiment of the Invention]Hereafter, the embodiment of this invention is described with reference to drawings. Drawing 1 is a functional block diagram showing the composition of the communication processing unit by one embodiment of this invention. In drawing 1, 10 is a communication processing unit by this embodiment. This communication processing unit 10 is connected to Internet network N1, telephone network N2, and wireless circuit network N3 each.The terminating sets 18a-18c are formed in the communication processing unit 10, and the termination of the connection of each nets N1-N3 is carried out.

[0010]The terminal units T1, such as a personal computer, are connected to Internet network N1, the telephone T2 is connected to the telephone network N2, and portable telephone T3 is connected to the wireless circuit network N3 via the base station B. Although the graphic display is omitted, a facsimile may be connected to the telephone network N2, and personal digital assistant devices, such as a mobile terminal, may be connected to the wireless circuit network N3. Hereafter, in naming these generically, it only calls it a "terminal unit."

[0011]Below, an addressee shall own all of the terminal unit T1 shown in drawing 1 for the facilities of explanation, the telephone T2, portable telephone T3 and also the facsimile that is not illustrated, and a personal digital assistant device. That is, an addressee shall receive the information transmitted by the sending person who uses any of the terminal unit T1, the telephone T2, portable telephone T3, a facsimile, and a personal digital assistant device they are, and does not illustrate.

[0012]In this embodiment, information means digitized various data, such as text, speech information, music information, and picture information (an animation and a still picture are included). The speech information transmitted via the telephone T2 or portable telephone T3 is included in speech information, and the data transmitted from the facsimile which is not illustrated is contained in picture information. Hereafter, the information said to this invention is called contents.

[0013]The communication processing unit 10 of this embodiment has the address administration department 12, the contents managing department 14, and the converter 16. The address administration department 12 matches and manages 1 or two or more mail arrival addresses which an addressee has, and the representative address representing this mail arrival address, as shown in drawing 2. Drawing 2 is a figure showing signs that two or more mail arrival addresses were matched with the representative address. In the example shown in drawing 2, two or more mail arrival addresses A1 - A3 are matched with the representative address A0. Here, the connected line identification (telephone number) of 1 in which an addressee has a mail arrival address or two or more e-mail addresses and the telephone T2, portable telephone T3, the facsimile that is not illustrated, and a personal digital assistant device is said.

[0014]The representative address A0 is an address representing all the above-mentioned mail arrival addresses A1 which an addressee has - A3, and arbitrary addresses are assigned for every addressee. As a representative address, a thing as shown in drawing 3 is assigned. Drawing 3 is a figure for explaining the

specification method of a representative address. As mentioned above, an addressee is a translation which owns the terminal unit T1, the telephone T2, portable telephone T3 and also the facsimile that is not illustrated, and the personal digital assistant device, but. In the case of the telephone T2, portable telephone T3 and also the facsimile that is not illustrated, and a personal digital assistant device, what gave special programs, such as "00**", to the head of that the telephone number which does not overlap with others, for example remains as it is, or this telephone number, for example is used as a representative address. When making an e-mail address into a representative address, as shown in drawing 3, it is set as a "representative address @ specific domain."

[0015]Thus, since the representative address which represents a mail arrival address with this embodiment for every addressee is defined, What is necessary is just to transmit contents to a representative address, when the sending person of contents transmits contents to an addressee, He does not need to be conscious of the kind of contents, the means of communication (the terminal unit T1, the telephone T2, portable telephone T3, a facsimile that is not illustrated, and a personal digital assistant device) which the addressee is using, an addressee's situation, etc. at all.

[0016]The contents managing department 14 carries out storage and file management of the contents transmitted to an addressee's addressing to a representative address from the sending person for every representative address of every, i.e., an addressee. That is, it can be told to the contents managing department 14 that PO Box for every addressee is provided. The converter 16 changes the contents by which are transmitted to a representative address and storage and file management is carried out to the contents managing department 14 into the form specified by the addressee.

[0017]Now, the case where the contents by which storage and file management is carried out to the contents managing department 14 are the E-mails which consist only of text is considered. In this case, when an addressee receives in the form of an E-mail using the terminal unit T1, receiving in the form of an E-mail by an addressee is specified. At this time, the converter 16 does not perform a conversion process to the contents by which storage and file management is carried out to the contents managing department 14.

[0018]However, when an addressee receives in the form of a sound using the telephone T2 or portable telephone T3, receiving in the form of a sound by an addressee is specified. At this time, as for the converter 16, transmitting [the E-mail with which storage and file management of the converter 16 is carried out to the contents managing department 14] origin changes air time, a title (subject), and the text (each of these is text) of an E-mail into speech information. When receiving in the form of the facsimile which an addressee does not illustrate is specified, the converter 16 changes the E-mail memorized by the contents managing department 14 into the picture information which can receive by a facsimile. When speech information is saved in the contents managing department 14, the converter 16 is changed into text, and also is changed into picture information. When picture information is saved in the contents managing department 14, the converter 16 is changed into text, and also is changed into speech information.

[0019]In the above, although the composition of the communication processing unit by one embodiment of this invention was explained, the communication processing method by one embodiment of operation of the communication processing unit by one embodiment of this invention, i.e., this invention, is explained below. Drawing 4 is a flow chart which shows the outline flow of the communication processing method by one embodiment of this invention. First, an addressee accesses the communication processing unit 10, and as

shown in drawing 2, he registers the representative address and the mail arrival address into the address administration department 12 beforehand (Step S10).

[0020]Registration with a representative address and a mail arrival address is completed, and if a sending person transmits contents to the representative address which the addressee registered, storage and file management of the transmitted contents will be carried out to the contents managing department 14 (Step S20). When the contents which the sending person transmitted are digitized here, it is saved as it is in the contents managing department 14, and are managed, but. For example, when a sending person transmits speech information to a representative address from telephone, speech information is digitized and storage and file management is carried out to the contents managing department 14 as contents.

[0021]In the state where storage and file management of the contents is carried out to the contents managing department 14, an addressee accesses the communication processing unit 10, for example using the terminal unit T1, and specifies the form of the mail arrival address and reception which receive the contents memorized by the contents managing department 14. For example, when an addressee operates the terminal unit T1 and has accessed the communication processing unit 10, a specific e-mail address is specified as a mail arrival address, and it specifies receiving in the form of an E-mail.

[0022]The converter 16 will be changed into the form (for example, form of an E-mail) specified by the addressee in the contents memorized by the contents managing department 14 if the above-mentioned directions are made by the addressee. After the conversion process by the converter 16 is completed, a communication processing unit transmits the contents after conversion to the mail arrival address specified by the addressee (Step S30).

[0023]As mentioned above, by the above-mentioned embodiment, although the communication processing method and device by one embodiment of this invention were explained, when an addressee receives contents, there is fault that the communication processing unit 10 must be accessed using a terminal unit. It is higher for convenience for the addressee to specify the mail arrival address and form of receiving contents beforehand, and the time to receive to the communication processing unit 10, and to transmit contents to the mail arrival address specified automatically, if the specified time comes in order to solve this.

[0024]Next, other embodiments of this invention which realize this function are described. In the communication processing unit by other embodiments of this invention, drawing 5 is a figure showing the receiving condition beforehand specified as a communication processing unit. As shown in drawing 5, the item specified to the communication processing unit 10 has the mail arrival time C1, the mail arrival address C2, the media classification C3, and the processing C4 at the time of busy. The mail arrival time C1 is an item which specifies the time which receives a message in the contents transmitted to the representative address, i.e., the time which the communication processing unit 10 transmits. The mail arrival address C2 is an item which specifies the mail arrival address with which the communication processing unit 10 transmits the contents transmitted to the representative address. The media classification C3 is an item which specifies the form that an addressee receives contents. The processing C4 at the time of busy is an item which specifies a solution when an error arises at the time of transmission of contents.

[0025]For example, in the parameter P1, 17:00 is specified as the mail arrival time C1, the mail arrival address A1 is specified as the mail arrival address C2, an E-mail is specified as the kind C3 of media, and the retry is specified as the processing C4 at the time of busy. Here, a retry is processing which transmits

contents to the mail arrival address again after fixed time, when an error arises at the time of contents transmission. This retry time is appointed beforehand.

[0026]As shown in drawing 5, the mail arrival time C1, the mail arrival address C2, the media classification C3, and the processing C4 at the time of busy are not the translations which can specify only one respectively, and can attach and carry out the plural specifications of the priority. In the example shown in drawing 5, each item specified with the parameter P1 is given top priority, and priority is given to each item specified with the parameter P2 next. That is, when contents are transmitted on condition of the parameter P1 and contents cannot be transmitted although number-of-times retry processing defined beforehand was performed, contents will be transmitted on condition of the parameter P2. When the addressee sets up beforehand each item explained above to the communication processing unit 10, the contents addressed to an addressee's representative address will be transmitted to the mail arrival address specified as the time which the addressee specified in the specified form.

[0027]Since the contents which the sending person transmitted to the representative address are receivable in the form specified as the mail arrival address specified by an addressee according to this embodiment as explained above, When an addressee receives the contents transmitted to the representative address, there is no inconvenience which can receive by a means of communication or cannot receive. Since an addressee can specify mail arrival time, an addressee can omit the time and effort which checks the existence of the arrival of the contents to a representative address intentionally, and can raise convenience.

[0028]As mentioned above, although the embodiment of this invention was described, this invention is not restricted to the above-mentioned embodiment, and can be freely changed within the limits of this invention. For example, it may realize by hardware or the address administration department 12, the contents managing department 14, and the converter 16 which the communication processing unit 10 shown in drawing 1 has may be realized by software. These may be realized as one device and each may be realized by the individual device connected in the network.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1]It is a functional block diagram showing the composition of the communication processing unit by one embodiment of this invention.
[Drawing 2]It is a figure showing signs that two or more mail arrival addresses were matched with the representative address.
[Drawing 3]It is a figure for explaining the specification method of a representative address.
[Drawing 4]It is a flow chart which shows the outline flow of the communication processing method by one embodiment of this invention.
[Drawing 5]In the communication processing unit by other embodiments of this invention, it is a figure showing the receiving condition beforehand specified as a communication processing unit.
[Description of Notations]
A1 - A3 Mail arrival address
A0 representative address
12 address administration department (address administration means)
14 Contents managing department (information control means)
16 Converter (conversion method)

[Translation done.]

United States Patent **7,443,489**
Natan **October 28, 2008**

Surface enhanced spectroscopy-active composite nanoparticles

Abstract

Metal nanoparticles associated with a spectroscopy-active (e.g., Raman-active) analyte and surrounded by an encapsulant are useful as sensitive optical tags detectable by surface-enhanced spectroscopy (e.g., surface-enhanced Raman spectroscopy).

Inventors: **Natan; Michael J.** (San Carlos, CA)
Assignee: **Oxonica, Inc.** (Mountain View, CA)
Appl. No.: **11/132,471**
Filed: **May 18, 2005**

Related U.S. Patent Documents

Application Number	Filing Date	Patent Number	Issue Date
10345821	Jan., 2003	7192778	
09680782	Feb., 2003	6514767	
60190395	Mar., 2000		
60157931	Oct., 1999		

Current U.S. Class: **356/36**
Current International Class: G01N 1/00 (20060101)
Field of Search: 356/36,300,301

References Cited [Referenced By]

U.S. Patent Documents

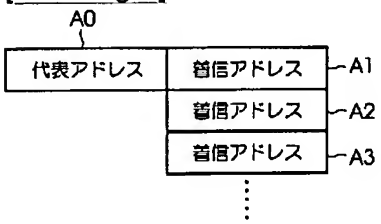
5023139	June 1991	Birnboim et al.
5266498	November 1993	Tarcha et al.
5445972	August 1995	Tarcha et al.
5609907	March 1997	Natan

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DRAWINGS

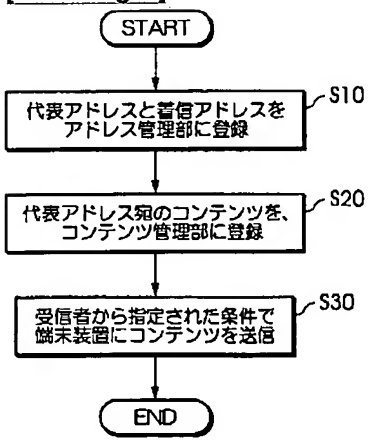
[Drawing 2]



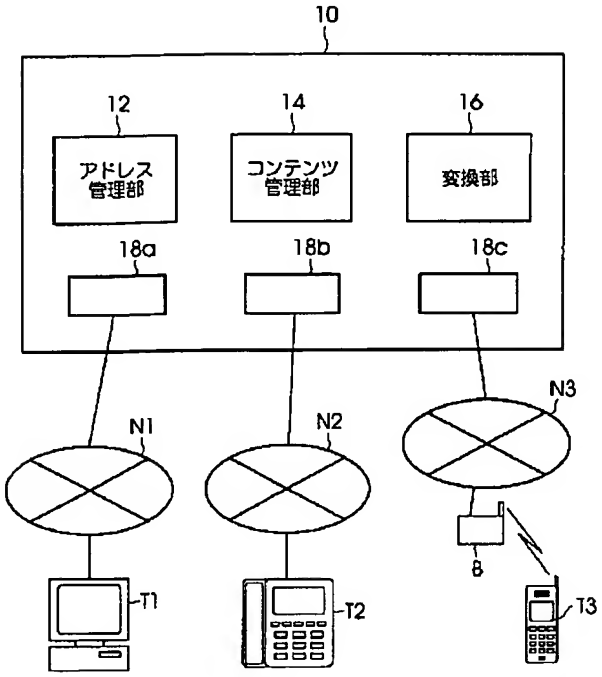
[Drawing 3]

代表アドレスの種別	代表アドレスの指定方法
電話、FAX、携帯端末	特番+代表アドレス 又は 代表アドレス
電子メール	代表アドレス@特定ドメイン

[Drawing 4]



[Drawing 1]



[Drawing 5]

	項目	P1 パラメータ	P2 パラメータ	
C1	着信時間	17：00	18：00	
C2	着信アドレス	着信アドレスA1	着信アドレスA2	·····
C3	メディア種別	電子メール	音声	
C4	ビジー時の処理	リトライ	不達	

[Translation done.]